

A REVIEW OF THE *PLATYSQUILLA* COMPLEX
(CRUSTACEA, STOMATOPODA, NANNOSQUILLIDAE),
WITH THE DESIGNATION OF TWO NEW GENERA

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Abstract.—*Platysquilla* Manning, 1967, is redefined, with *P. eusebia* (Risso, 1816) as its only species. The other species previously assigned to *Platysquilla*, *Lysiosquilla enodis* Manning, 1962, and *Platysquilla horologii* Camp, 1971, are removed and made the type-species of two new, monotypic genera, *Platysquilloides* and *Mexisquilla*, respectively. The three genera are defined, and the type-species are re-illustrated.

The nomenclatural histories of *Squilla eusebia* Risso, 1816, and *Lysiosquilla enodis* Manning, 1962, were briefly summarized by Camp (1971:21). Both had been transferred to *Heterosquilla* (Manning, 1963) and later to *Platysquilla* (Manning, 1967), with *S. eusebia* designated as type-species of the latter genus.

When *Platysquilla horologii* Camp, 1971, was described, the three known specimens did not fully agree with the definition of the genus, although it was recognized that they agreed more closely with *Platysquilla* than with any other established genus. Therefore, a very conservative approach was taken, and the generic description was emended to allow the inclusion of *P. horologii* in *Platysquilla*. With the discovery of additional specimens of *P. horologii* (R. W. Heard and D. K. Camp, in prep.), and after further consideration of the relationships between the three species, we believe the latter are sufficiently different from one another to warrant their separation into three monotypic genera.

Platysquilla Manning, 1967

Platysquilla Manning, 1967:238.—Holthuis, 1967:26.—Manning, 1968:111; 1969:90.—Camp, 1971:120.—Manning, 1977:93; 1980:368 [In part].

Definition.—Size moderate, total length 75 mm or less; body smooth, depressed, loosely articulated; eye of moderate size, cornea expanded but not bilobed, set obliquely on stalk; rostral plate subquadrate with apical spine, lateral margins straight, anterolateral corners rounded; antennal protopod with 2 mesial and 2 ventral papillae; carapace narrowed anteriorly, without carinae or spines, cervical groove indicated on lateral plate only; thoracic somites without dorsal carinae, lateral margins truncate; eighth

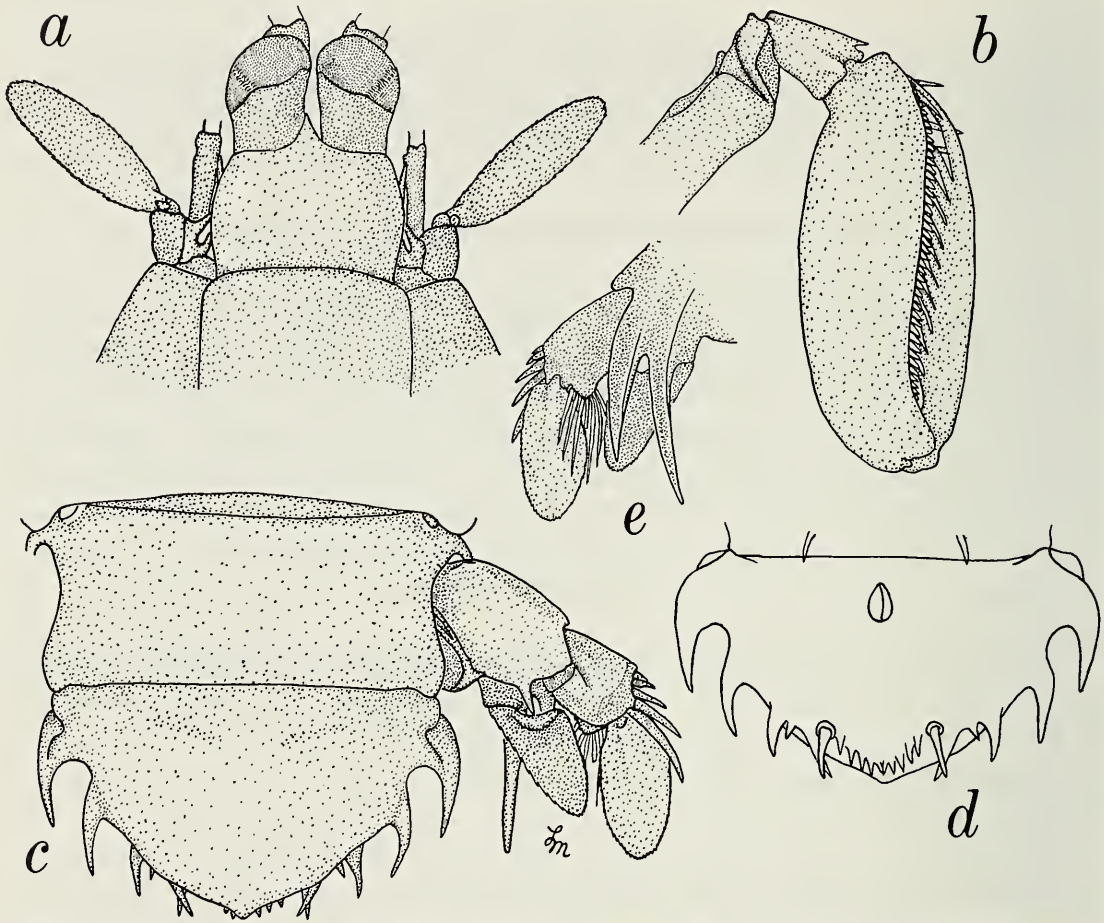


Fig. 1. *Platysquilla eusebia*, female, 44.5 mm, Naples, Italy, USNM 23207: a, Front; b, Claw; c, Sixth abdominal somite, telson, and uropod; d, Telson, ventral view; e, Uropod, ventral view.

thoracic somite without low, inconspicuous tubercle on midline of ventral surface; 5 epipods present; mandibular palp absent; raptorial claw slender, dactylus not inflated basally; outer margin of dactylus faintly notched basally; propodus fully pectinate with 4 movable spines at base, first longest, second shortest; carpus with distal, dorsal spine; ischiomerar articulation terminal; merus slender, elongate, longer than ischium; endopods of walking legs 2-segmented, distal segment of first 2 legs ovate, that of last leg slenderest; abdomen depressed, loosely articulated, anterolateral plates with complete suture; sixth abdominal somite without posterolateral spines, with curved, ventrally directed process present on each side in front of articulation of uropod, with 2 strong spines on ventral, posterior margin; telson broad, with obtuse, triangular, wide median posterior projection; marginal armature of telson consisting of row of slender submedian denticles, 1 movable submedian tooth, and 4 sharp, fixed lateral teeth, usually with slender denticle or tubercle between fixed teeth; basal segment of uropod with 2 dorsal carinae, inner terminating in slender spine; proximal segment of ex-

opod with short dorsal carina, outer margin armed with slender, movable, sharp spines; endopod triangular, with proximal portion of outer edge folded over dorsally; spines of basal prolongation triangular in cross-section, inner spine longer. [Modified from Manning, 1969:90.]

Type-species.—*Squilla eusebia* Risso, 1816, by original designation. See Figure 1.

Gender.—Feminine.

Number of species.—One.

Distribution.—Mediterranean Sea and adjacent North Atlantic, off Portugal, France, and the west coast of Ireland (Manning, 1977).

Platysquilloides, new genus

Platysquilla Manning, 1967:238.—Holthuis, 1967:26.—Manning, 1968:111; 1969:90.—Camp, 1971:120.—Manning, 1977:93; 1980:368 [In part].

Definition.—Size moderate, total length 70 mm or less; body smooth, depressed, loosely articulated; eye of moderate size, cornea faintly bilobed, set obliquely on stalk; rostral plate subquadrate with apical spine, lateral margins slightly convex, anterolateral corners rounded; antennal protopod with 1 mesial and 2 ventral papillae; carapace narrowed anteriorly, without carinae or spines, cervical groove indicated on lateral plate only; thoracic somites without dorsal carinae, lateral margins truncate; eighth thoracic somite with low, inconspicuous tubercle on midline of ventral surface; 4 epipods present; mandibular palp absent; raptorial claw slender, dactylus not inflated basally; outer margin of dactylus strongly notched basally; propodus fully pectinate, with 4 movable spines at base, first longest, second shortest; carpus with distal, dorsal spine; ischiomerale articulation terminal; merus slender, elongate, longer than ischium; endopods of walking legs 2-segmented, distal segment of first 2 legs ovate, that of last leg slenderest; abdomen depressed, loosely articulated, anterolateral plates with complete suture; sixth abdominal somite with sharp posterolateral spines, with curved, ventrally directed process present on each side in front of articulation of uropod, without spines on ventral, posterior margin; telson broad, with obtuse, subtriangular, narrow median posterior projection; marginal armature of telson consisting of row of slender submedian denticles, 1 movable submedian tooth, and 4 fixed lateral teeth, mesial 2 spatulate, with slender denticle between fixed teeth; basal segment of uropod with 2 dorsal carinae, inner terminating in slender spine; proximal segment of exopod with short dorsal carina, outer margin armed with spatulate, movable spines; endopod triangular, with proximal portion of outer edge folded over dorsally; spines of basal prolongation triangular in cross-section, inner spine longer.

Type-species.—*Lysiosquilla enodis* Manning, 1962. See Figure 2.

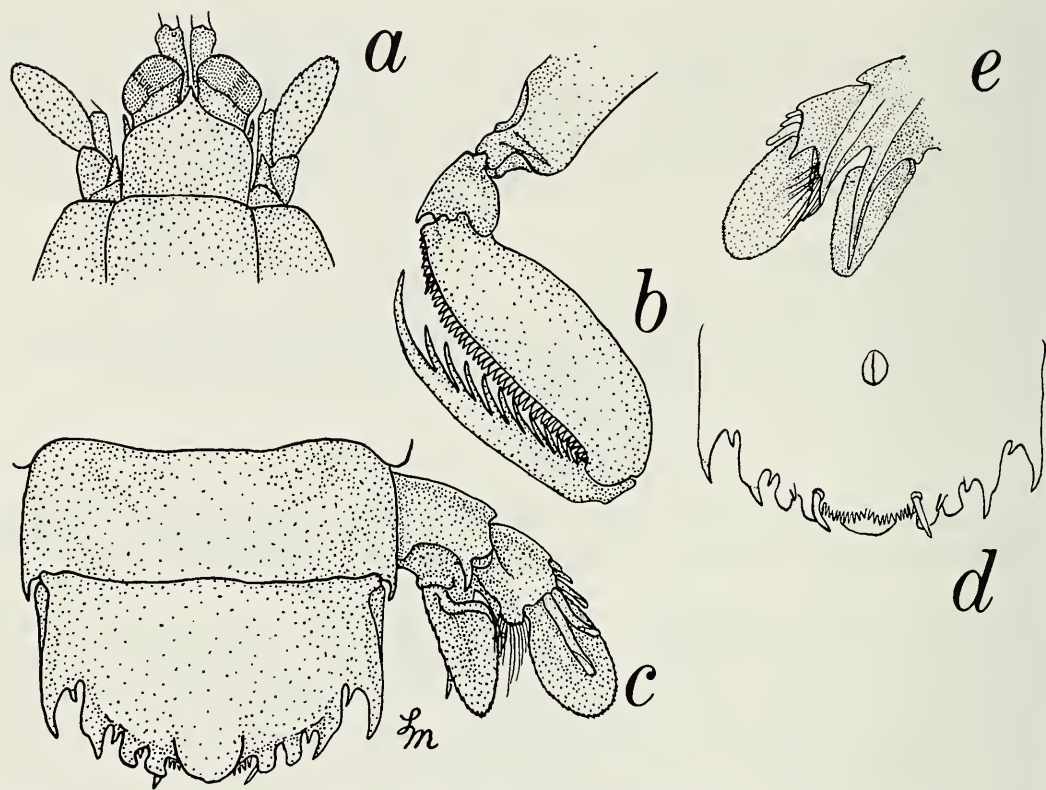


Fig. 2. *Platysquilloides enodis*, male, 48 mm, off New Jersey, USNM 172218: a, Front; b, Claw; c, Sixth abdominal somite, telson, and uropod; d, Telson, ventral view; e, Uropod, ventral view.

Etymology.—The name is composed of the generic name *Platysquilla* with the Latin suffix “-oides,” meaning “resembling.”

Gender.—Masculine.

Number of species.—One.

Remarks.—This new genus differs from *Platysquilla* in having 4, rather than 5, epipods and in having 1 mesial papilla on the antennal peduncle, rather than having 2 mesial papillae. It shares other, less significant, characteristics with the other western Atlantic genus described below which further separate them from the eastern Atlantic *Platysquilla*. These include the presence of a strong, rather than faint, proximal notch on the dactylus of the raptorial claw, the lack of submedian spines on the ventral, posterior margin of the sixth abdominal somite, the presence of posterolateral spines on the sixth abdominal somite, a narrow, rather than broad, posterior median projection on the dorsum of the telson, and spatulate, rather than sharp, movable spines on the outer margin of the exopod of the uropod.

Distribution.—Northwestern Atlantic, from scattered localities between Massachusetts and North Carolina (Manning, 1969), including 16 km N of Atlantic City, New Jersey, and off Maryland and Virginia (Howells, Karp, and Langton, 1980).

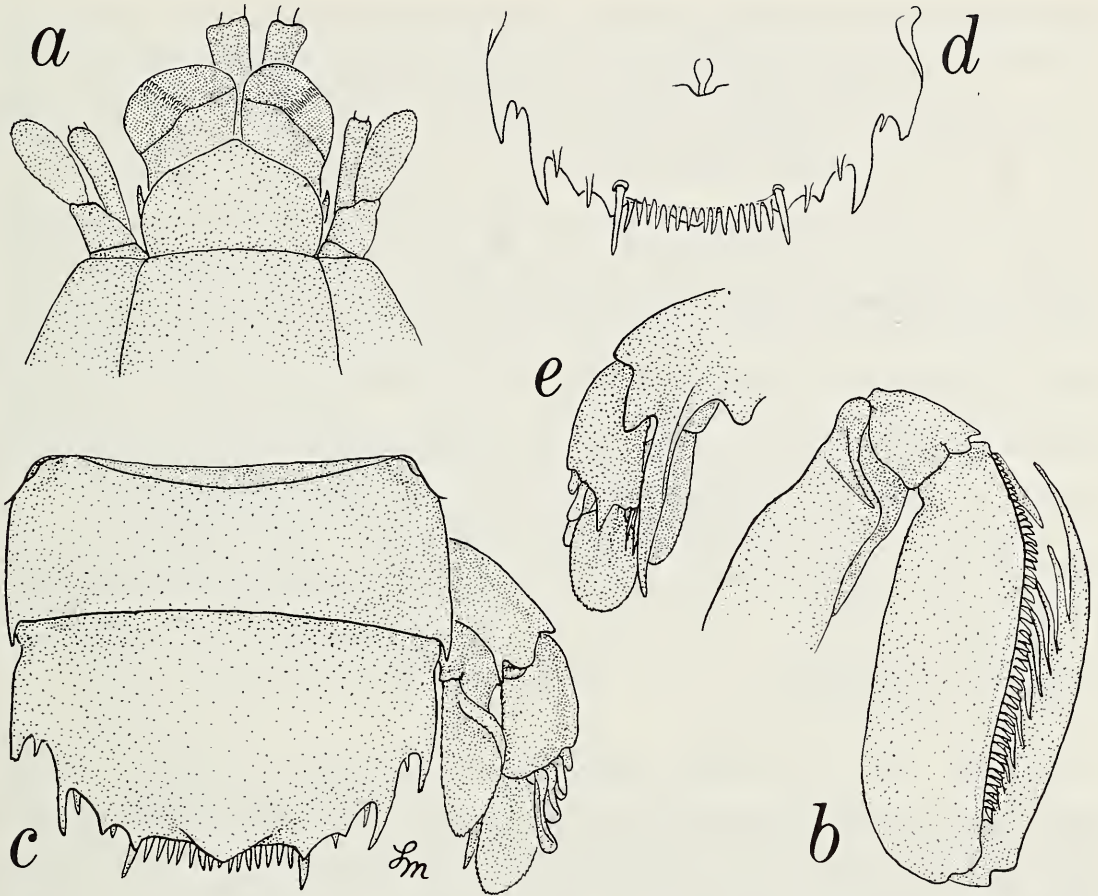


Fig. 3. *Mexisquilla horologii*, female paratype, ca. 16 mm, west of Egmont Key, Florida, USNM 128832: a, Front; b, Claw; c, Sixth abdominal somite, telson, and uropod; d, Telson, ventral view; e, Uropod, ventral view.

Mexisquilla, new genus

Platysquilla.—Camp, 1971:120 [In part].

Definition.—Size small, total length 20 mm or less; body smooth, depressed, loosely articulated; eye of moderate size, cornea faintly bilobed, set obliquely on stalk; rostral plate cordiform, lateral and anterolateral margins broadly rounded, sloping to obtuse apex; antennal protopod without mesial papillae, with 2 ventral papillae; carapace narrowed anteriorly, without carina or spines, cervical groove indicated on lateral plate only; thoracic somites without dorsal carinae, lateral margins truncate; eighth thoracic somite with low, inconspicuous tubercle on midline of ventral surface; 3 epipods present; mandibular palp absent; raptorial claw slender, dactylus not inflated basally; outer margin of dactylus strongly notched basally; propodus fully pectinate, with 4 movable spines at base, first longest, second shortest; carpus with distal, dorsal spine; ischiomerale articulation terminal; merus slender, elongate, longer than ischium; endopods of walking legs 2-

segmented, distal segment of first 2 legs ovate, that of last leg slenderest; abdomen depressed, loosely articulated, anterolateral plates with complete suture; sixth abdominal somite with sharp posterolateral spines, with curved, ventrally directed process present on each side in front of articulation of uropod, without spines on ventral, posterior margin; telson broad, with obtuse, subtriangular, narrow median posterior projection; marginal armature of telson consisting of row of slender submedian denticles, 1 movable submedian tooth, and 4 fixed lateral teeth, mesial 2 sharp, with slender denticle between fixed teeth; basal segment of uropod with 2 dorsal carinae, inner terminating in slender spine; proximal segment of exopod with short dorsal carina, outer margin armed with spatulate, movable spines; endopod triangular, with proximal portion of outer edge folded over dorsally; spines of basal prolongation triangular in cross-section, inner spine longer.

Type-species.—*Platysquilla horologii* Camp, 1971. See Figure 3.

Etymology.—*Mexisquilla* is derived from Gulf of Mexico and the generic name *Squilla*. It alludes to the apparent restriction of members of the genus to the Gulf of Mexico.

Gender.—Feminine.

Number of species.—One.

Remarks.—This new genus differs from *Platysquilla* in having 3, rather than 5, epipods and in having no mesial papillae on the antennal peduncle rather than having 2 such papillae. Other characteristics which differ from those of *Platysquilla*, but which are shared with *Platysquilloides*, are discussed under the latter genus.

Mexisquilla also differs from *Platysquilloides* in having fewer epipods and fewer antennal papillae than are present on the latter genus.

Mexisquilla differs from both *Platysquilla* and *Platysquilloides* in its overall size and degree of development. *Mexisquilla horologii* is relatively much smaller than the type-species of the other two genera. It also shows reduction in development of the telson characters relative to such development in *Platysquilla eusebia* and *Platysquilloides enodis*. The possibility of neotenic origin of *M. horologii* was discussed by Camp (1973:18).

Distribution.—Eastern Gulf of Mexico (Camp, 1971, 1973).

Acknowledgments

We thank F. A. Chace, Jr., L. B. Holthuis, and W. G. Lyons for commenting on the manuscript, Lilly King Manning for preparing the illustrations, and R. W. Heard for offering specimens of *M. horologii* for study.

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